



# AN INNOVATIVE METHOD OF USING AN UNUSED IMPLANT FIXTURE MOUNT AS AN IMPLANT ANALOG AND IMPRESSION COPING FOR MAKING A DEFINITIVE PROSTHESIS USING OPEN MOUTH IMPRESSION TECHNIQUE

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## ABSTRACT

Self-learning Materials (SLM) play a major role in the teaching-learning process at all levels of education and training. As often many of the learners pursuing teacher education programme in special education through open and distance mode of learning. The article sought the opinion of the learners on the preciseness of the study material catered to them. Preciseness as defined in this study is the comprehensibility of the material in use. Both academic and physical aspects of self-learning material have been studied. The academic aspects include selection, organization and presentation of content with an overview of language, pacing, illustration, exercise & assignments. Whereas physical aspects of self-learning materials include printing, lay-out & get-up, durability, and size. This particular section of the stake holders were chose to deep deal in learner friendliness of the material. The sampling was incidental-purposive and a descriptive survey method was used.

**KEY WORDS:** Special education training programme, Self-learning material, open distance learning.

## INTRODUCTION

An implant fixture mount is often discarded after implant placement, its use is limited just to carry implant fixture while placement of implant in patients mouth. So it remains unused after it and does not perform any function after that. This innovative technique describe the use of implant fixture mount as an impression coping as well as implant analog which utilizes its usefulness while making an impression for an implant without using costlier impression posts and implant analog.

## MATERIALS AND METHOD

### MATERIALS

- 1) Implant fixture mount (Adin Israel) - 30
- 2) Rubber base impression material (Kerr)
  - a) Putty - 3 jars 400 gm
  - b) Light body - 6 cartridge 50 ml
- 3) Carborandum disc 3 boxes (L and K)
- 4) Self cure acrylic resin (Pyrex)
  - a) Monomer 5 liter
  - b) Polymer 3 kg
- 5) Impression trays (rim lock) GDC
- 6) Alginate impression material (Neocolloid) 6 packets
- 7) Die stone 3kg 2boxes (Kalabhai)
- 8) Hex driver (Adin Israel)
- 9) Soft tissue liner (molloseal)
- 10) Porcelain fused to metal crown (Ceremco 3) - 1 bottle

### METHOD

For this study already placed 30 implants sites is selected.

- 1) Press fit implant fixture mount (Adin dental implant sys. Ltd. Israel) is used for impression making for definitive prosthesis as an impression coping and implant analogue<sup>1</sup> (**Fig 1**).



**Fig 1 Implant fixture mount**

- 2) Modification of implant fixture mount is done to fabricate prosthetic components.
- 3) Implant fixture mount is cut from the center into two separate parts with the help of carborendum disc (l&k) out of which one part is used as an impression coping and other as an implant analogue (**Fig 2**).



**Fig 2 Implant fixture mount in two separate parts**

- 4) Lower part of Implant fixture mount should be conservatively modified in such a way that it gets placed on implant without any obstruction<sup>2</sup>. (**Fig 3**)



**Fig 3 Fitting of mount for press fit**

- 5) Self cure acrylic resin (DPI) is used to build the outer portion of the impression coping to achieve the press fit. (Fig 4)



**Fig 4 Attachment of cold cure resin with mount**

- 6) Self cure acrylic resin (Pyrex) build up over lower part of the implant fixture mount is used to achieve press fit while making impression and for the easy removal of the impression from the mouth. Other cut portion of the implant fixture mount is modified by using self cure acrylic resin and be used as implant analogue<sup>3</sup>. (Fig 5)



**Fig 5 Open tray impression**

- 7) Open tray technique is used to make the impression. (Fig 6) Putty and light body consistency of addition silicone impression material (Kerr) is loaded in to rim locked perforated tray (GDC) for making the impression. After the impression is made it is poured with die stone (Kalabhai), and gingival soft liner (Molloseal) is applied to it<sup>4</sup>.



**Fig 6 Final impression**

- 8) The cast is obtained after the final set and a definitive prosthesis of porcelain fused to metal (Ceremco 3) is fabricated by using these parts<sup>5</sup>.
- 9) The final prosthesis is then cemented with zinc phosphate cement<sup>6</sup> (Harward).

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